

<b>Notice of Allowability</b>	Application No.	Applicant(s)
	09/687,759	REINITZ ET AL.
	Examiner	Art Unit
	Daniel L. Greene	3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 1/25/2006.

2.  The allowed claim(s) is/are 8-14 and 25.

3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All    b)  Some\*    c)  None    of the:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

(a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.

(b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of  
Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**

6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_.
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

## EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Andrew V. Smith. Ph.D., on 3/2/2006.

The application has been amended as follows:

Claims 1-7 and 23-24 are cancelled.

Claims 8 and 25 are amended as follows:

8. (Currently Amended) ~~The method of claim 5~~ A method for providing a cut grade for a gemstone, comprising:

illuminating a gemstone model with a point light source at infinite distance;  
refracting light elements, originating from the point light source, through  
the gemstone model;

evaluating the fire of the gemstone model using a metric, wherein  
evaluating the fire includes a calculation of the Dispersed Color Light Return.  
[DCLR].

25. (Currently Amended) ~~The method of claim 15~~ A method for providing a cut grade for a gemstone comprising:

analyzing cut proportions of a gemstone;  
comparing the cut proportions of the gemstone with a list of proportion  
grades that depend, at least in part, on a calculation of dispersed color light  
return;

providing a grade for the gemstone based on said list of proportion grades, wherein the grade is a fire grade.

The following is an examiner's statement of reasons for allowance:

As per claims 8 and 25, the closest prior art of record Shannon, Sr. US 5,966,673 and Valente et al. US 5,615,005 taken either individually or in combination with other prior art of record fails to teach or suggest a method or system for grading of the cut of a gemstone incorporating a list of proportion grades that depend on the calculation of the dispersed color light return.

The specific allowable feature, which distinguishes the present invention over the prior art, is the use of a list of proportion grades referencing the calculation of the DCLR. The prior art refers to determining the "fire" or dispersion but does not provide the list of proportion grades based upon the calculation of the dispersed color light return. Claim 8 uses the term "a metric" which is one in the same as the use of a list of proportion grades referencing the calculation of the DCLR.

Claim 9-14 are dependent upon Claim 8 and thus has all the limitations of claim 8 and are allowable for that reason.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel L. Greene whose telephone number is 571-272-6707. The examiner can normally be reached on M-Thur. 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Daniel L. Greene  
Examiner  
Art Unit 3621

3/6/2006